DRAWINGS AND PERFORMANCE DATA

FIG. 1 Wavelet Tiling of an N-Point Digital t-f Space

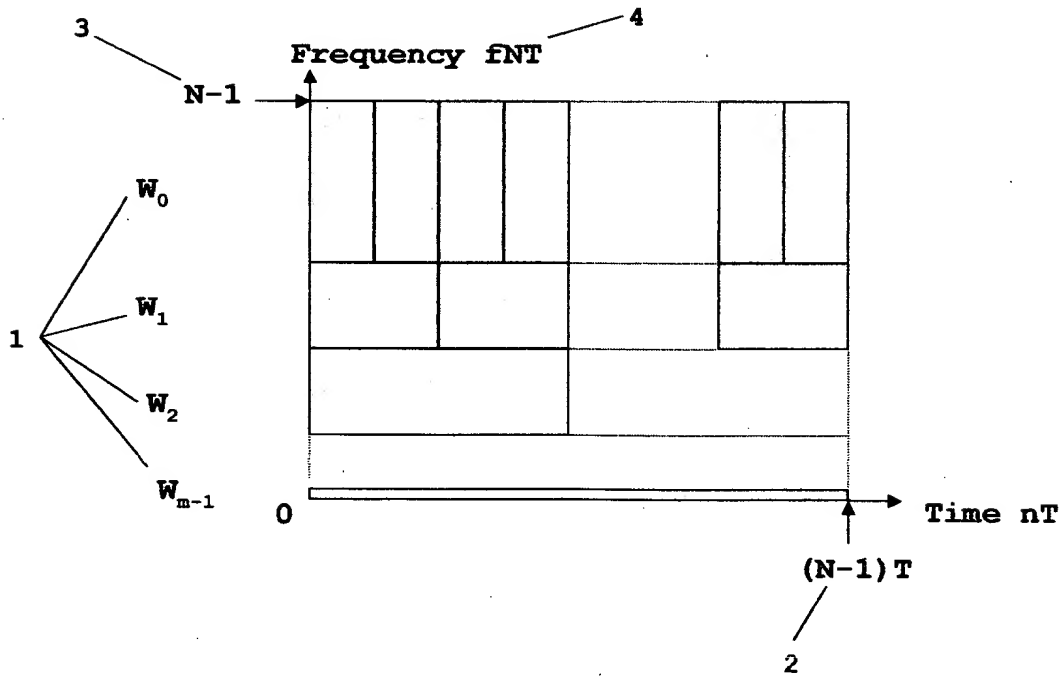


FIG. 2 Wavelet Iterated Filter Bank for Tiling t-f Space in FIG. 1

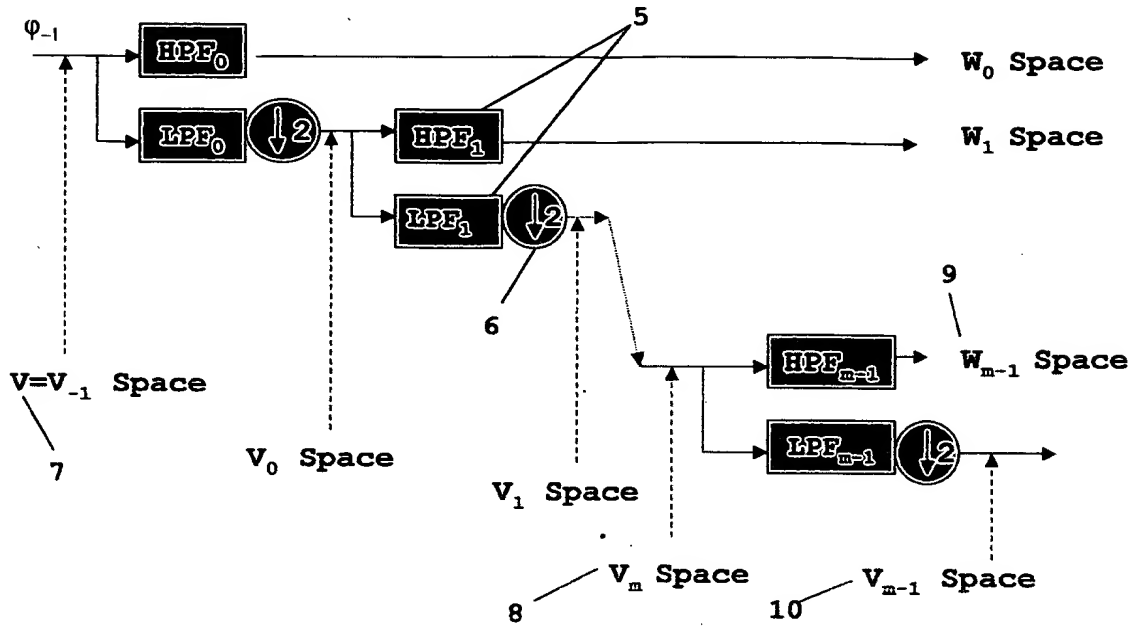
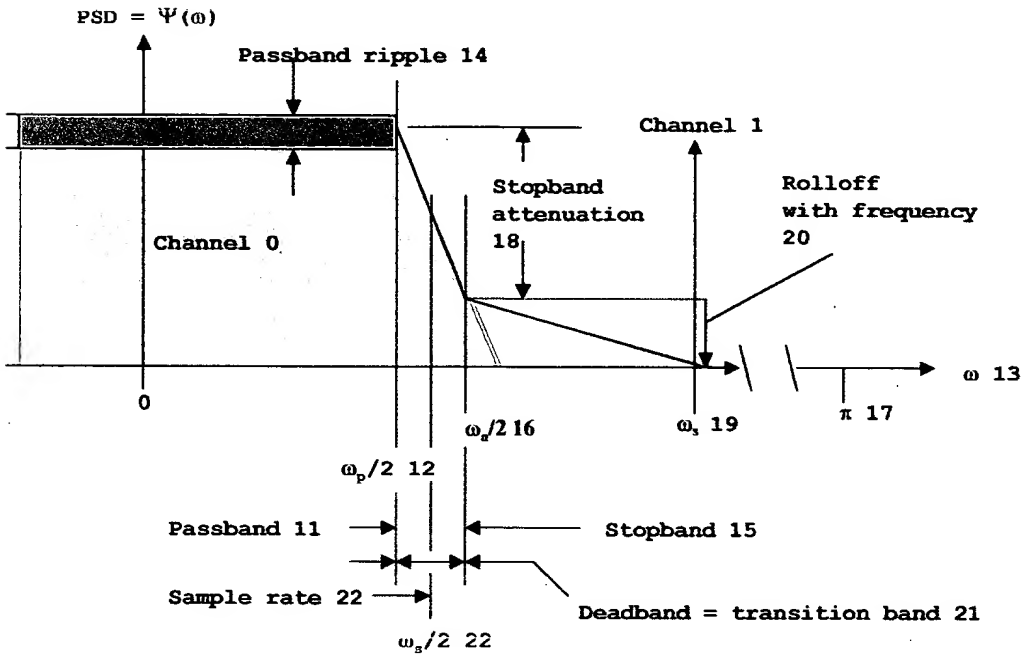
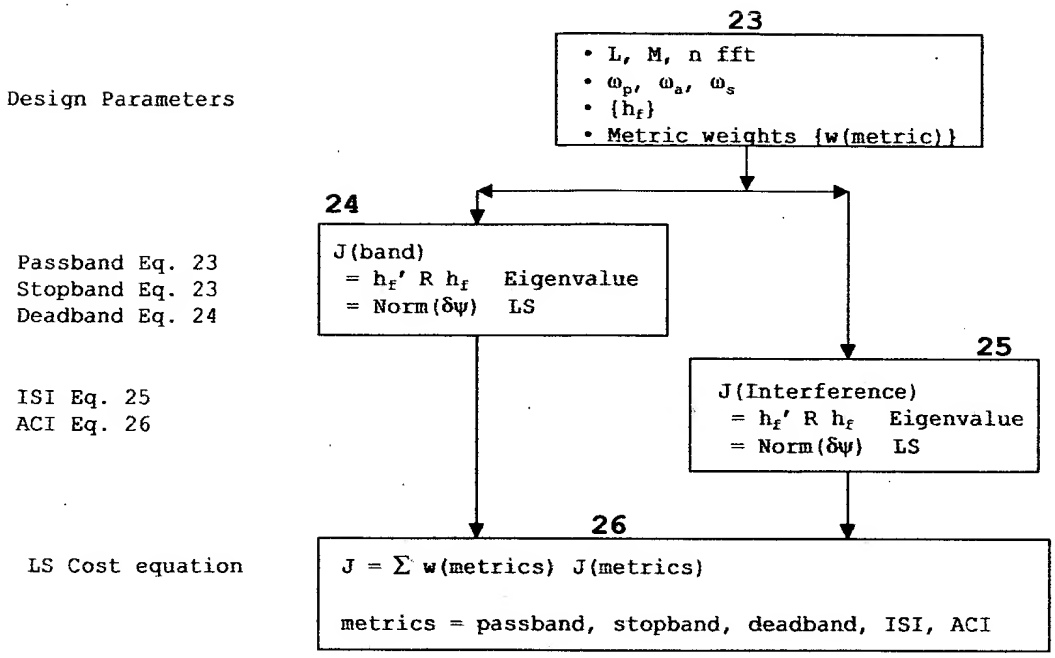


FIG. 3 PSD Requirements for Communications



## FIG. 4 LS Metrics and Cost Function



# FIG. 5 LS Recursive Solution Algorithm

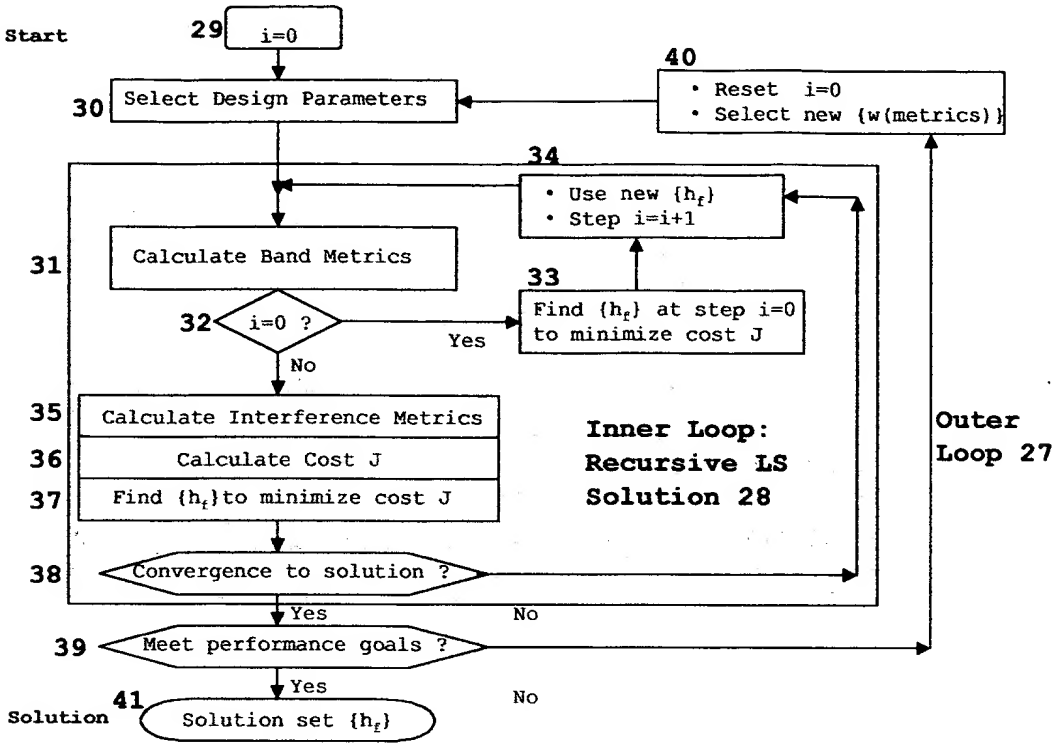


FIG. 6 PSD for New Waveform and Square-Root Raised-Cosine

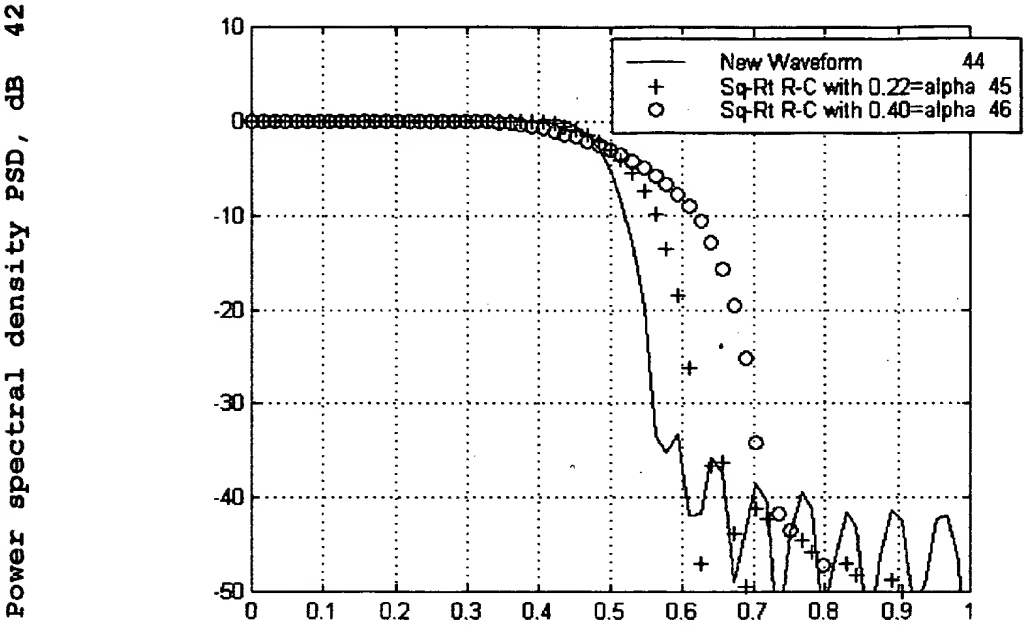


FIG. 7 PSD for New Waveform BEM and GMSK

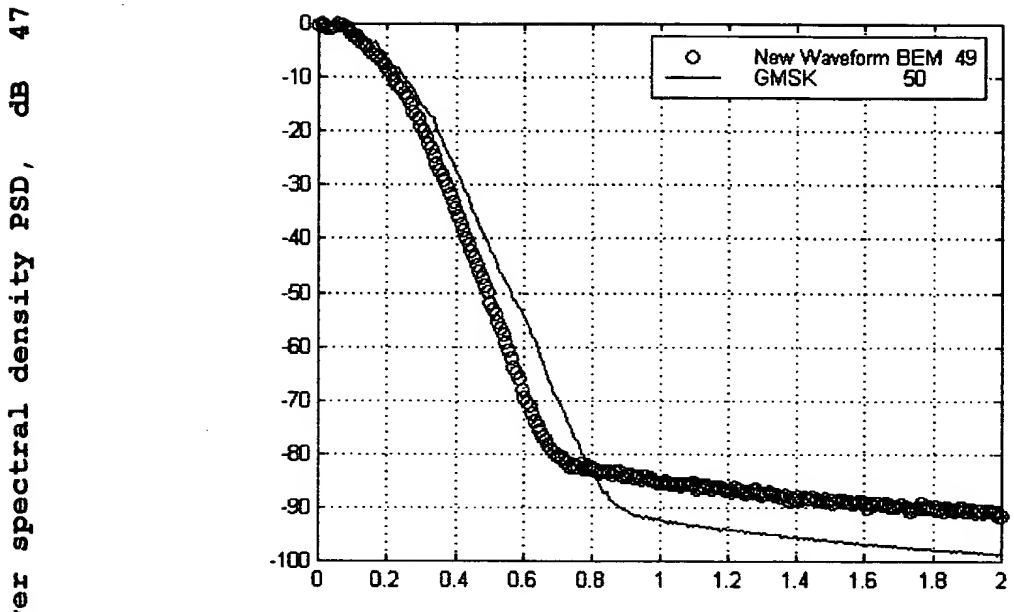
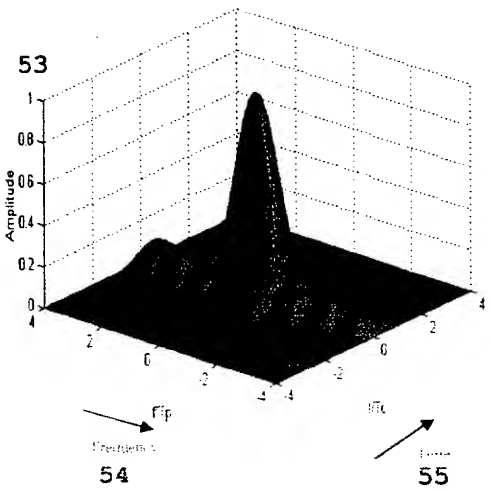
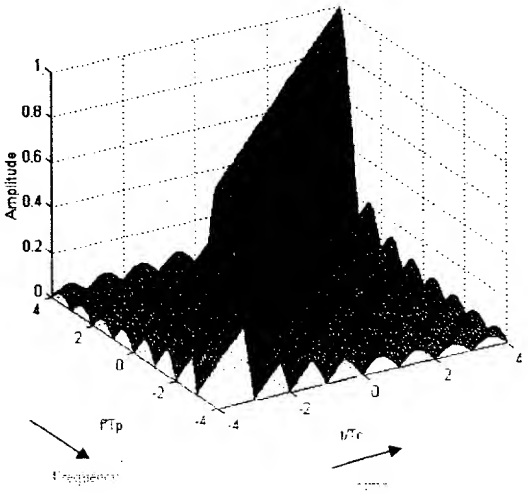


**FIG. 8 Radar Ambiguity Functions of New Waveform and Unweighted Chirp Waveform**

New Wavelet Ambiguity Function 51




Unweighted Chirp Ambiguity Function 52